

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

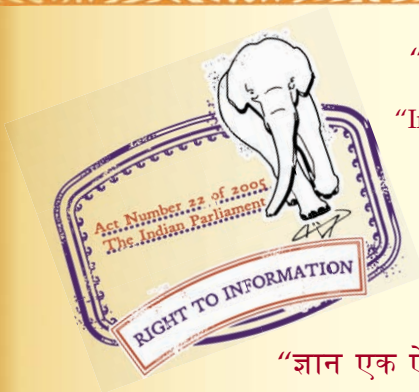
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 13826 (Part 6) (1993, Reaffirmed 2008): Bitumen Based Felt--Methods of Test, Part 6: Water Absorption Test. UDC 691.165 : 620.193.19



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

IS 13826 (Part 6) : 1993

भारतीय मानक

REAFFIRMED

बिटूमैन आधारित नमदा — परीक्षण पद्धतियाँ

FEB 2008

भाग 6 जल अवशोषण परीक्षण

Indian Standard

BITUMEN BASED FELTS METHODS OF TEST

PART 6 WATER ABSORPTION TEST

UDC 691.165 : 620.193.19

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

September 1993

Price Group 1

FOREWORD

This Indian Standard (Part 6) was adopted by the Bureau of Indian Standards, after the draft finalized by the Water-Proofing and Damp-Proofing Sectional Committee had been approved by the Civil Engineering Division Council.

Bitumen felts may be of different types depending upon the raw material used and their construction. IS 1322 : 1993 'Specification for bitumen felts for water proofing and damp-proofing (*fourth revision*)' and IS 7193 : 1993 'Specification for glass fibre based coal tar pitch and bitumen felts (*first revision*)', cover bitumen felts of hessian based and glass fibre base respectively. The above standards require, amongst other requirements, detailed testing of each of these products. Various methods of test relating to each product for determination of physical properties have been included in the separate standards. All types of felts have to satisfy some common essential physical requirements for which methods of test are same. A series of standards covering methods of test have, therefore, been formulated to cover the determination of various physical requirements of bitumen felt. This standard covers water absorption test. Other parts of the standard are as follows :

Part 1 Breaking strength test

Part 2 Pliability test

Part 3 Storage sticking test

Part 4 Pressure head test

Part 5 Heat resistance test

Part 7 Determination of binder content

The composition of the technical committee responsible for the formulation of this standard is given in Annex A.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

*Indian Standard***BITUMEN BASED FELTS — METHODS OF TEST****PART 6 WATER ABSORPTION TEST****1 SCOPE**

This standard (Part 6) covers the method for determination of the water absorption of bitumen felt when immersed in water at the normal atmospheric temperature for 24 hours.

2 REFERENCE

The Indian Standard IS 4911 : 1986 'Glossary of terms relating to bituminous water-proofing and damp-proofing of building' is a necessary adjunct to this standard.

3 TERMINOLOGY

3.0 For the purpose of this standard, the definitions given in IS 4911 : 1986 shall apply.

4 APPARATUS**4.1 Balance****4.2 Trough to Immerse Sample in Water****4.3 Arrangement for Hanging the Samples Diagonally****5 PROCEDURE**

5.1 From the sample selected, cut a strip 300 mm wide across the roll. Divide this into

three equal test pieces 300 × 300 mm and weigh the central test piece to nearest 0.1 g.

5.2 Immerse the central test piece completely in distilled water for 24 hours.

5.3 Remove the test pieces and hang the test pieces immediately diagonally for air drying in room at $27 \pm 2^\circ\text{C}$ and 65 ± 5 percent relative humidity for 45 minutes. Reweigh the sample to nearest 0.1 g.

6 CALCULATION

Calculate the water absorption as the percentage weight increase as given below:

$$\text{Water absorption} = \frac{M_2 - M_1}{M_1} \times 100$$

where

M_1 = mass of the piece before immersion in distilled water, and

M_2 = mass of the piece after hanged for 45 minutes.

7 REPORTING

Reporting shall include the following:

- a) Date of testing,
- b) Type of conditioning, and
- c) Observation.

ANNEX A
(Foreword)

COMMITTEE COMPOSITION

Composition of Water-Proofing and Damp-Proofing Sectional Committee, CED 41

Chairman

PROF M. S. SHETTY
No. 4, Sapan Baug, Near Empress Garden, Pune-411001

Members

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SHRI T. CHAUDHURY
SHRI B. MANDAL (*Alternate*)
DIRECTOR (DESIGN)
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SHRI Y. R. TANEJA,
Director Incharge (Civ Engg)

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National Test House (ER), Calcutta
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Secretary

SHRI J. K. PRASAD
Joint Director (Civ Engg), BIS